## IN THE CLAIMS

Please amend the claims as follows:

- 1. (Cancelled)
- 2. (Currently Amended) A method of expressing an antigenic <u>peptide</u> molecule on the surface of a viable cell, said method comprising:

contacting said cell with said antigenic a molecule comprising the antigenic peptide and with a photosensitizing agent, wherein said peptide molecule and said agent are each taken up into an intracellular membrane-restricted compartment of said cell; and

irradiating said cell with light of a wavelength effective to activate the photosensitizing agent, such that the membrane of said intracellular compartment is disrupted, releasing said peptide molecule into the cytosol of the cell, without killing the cell by irradiation;

wherein, said released <u>peptide</u> antigenic molecule, or a part thereof of sufficient size to generate an immune response, is subsequently presented on the surface of said cell by a class I <u>or</u> II MHC molecule;

wherein presentation of the peptide, or part thereof, on the surface of said cell results in stimulation of an immune response; and

wherein the photosensitizing agent is selected from the group consisting of a porphyrin, phthalocyanine, purpurin, chlorin, benzoporphyrin, naphthalocyanine, cationic dye, tetracycline, and a lysosomotropic weak base.

- 3. (Cancelled)
- 4. (Original) The method of claim 3 wherein the antigenic molecule is a vaccine antigen or vaccine component.
- 5. (Cancelled)

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6. (Previously Presented) The method of claim 2, wherein the cell is an antigen presenting cell selected from the group consisting of a lymphocyte, dendritic cell, macrophage and cancer cell.

## 7. (Cancelled)

- 8. (Previously Presented) The method of claim 2 wherein the photosensitizing agent is meso-tetraphenylporphine with 4 sulfonate groups (TPPS<sub>4</sub>), meso-tetraphenylporphine with 2 sulfonate groups on adjacent phenyl rings (TPPS<sub>2a</sub>), or aluminum phthalocyanine with 2 sulfonate groups on adjacent phenyl rings (AlPcS<sub>2a</sub>).
- 9. (Currently Amended) The method of claim 2, wherein the antigenic <u>peptide</u> molecule and/or photosensitizing agent is bound to one or more targeting agents or carrier molecules.
- 10. (Previously Presented) The method of claim 2, wherein said method is carried out *in vitro* or *in vivo*.

## 11-21. (Cancelled).

22. (Currently Amended) A method of expressing an antigenic <u>peptide</u> molecule on the surface of a cell capable of antigen presentation, said method comprising:

contacting said cell with said antigenie a molecule comprising the antigenic peptide and with a photosensitizing agent, wherein said peptide molecule and said agent are each taken up into an intracellular membrane-restricted compartment of said cell; and

irradiating said cell with light of a wavelength effective to activate the photosensitizing agent, such that the membrane of said intracellular compartment is disrupted, releasing said peptide molecule into the cytosol of the cell, without killing the cell by irradiation,

wherein, said released <u>peptideantigenic molecule</u>, or a part thereof of sufficient size to generate an immune response, is subsequently presented on the surface of said cell by a class I <u>or II MHC molecule</u>, and

## AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

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wherein the photosensitizing agent is selected from the group consisting of a porphyrin, phthalocyanine, purpurin, chlorin, benzoporphyrin, naphthalocyanine, cationic dye, tetracycline, and a lysosomotropic weak base.

23. (Cancelled)